

electrical energy distributed by continuous currents, by MM. A. and V. Guillet.—On a mode of decomposition of some metallic chlorides, by M. Echsner de Coninck. Gold can be completely removed from solutions of auric chloride by filtering through animal charcoal; solutions of the perchlorides of platinum and iron are also decomposed on filtration through animal charcoal. No such decomposition could be observed with the chlorides of nickel, cobalt, manganese, zinc, copper and magnesium.—On the conditions of stability of rotatory power, by M. J. A. Le Bel. It is found that at temperatures of 100° or thereabouts, many optically active bodies tend to lose their rotatory power by racemisation; on the other hand, if the asymmetric radicals grouped round a central atom are increased in volume, the stability is increased.—On the dihydroxylates, by M. de Forcrand.—Addition of hydrogen to acetylene in presence of copper, by MM. Paul Sabatier and J. B. Senderens. A mixture of hydrogen and acetylene passed over reduced copper at a temperature of 130°–200°, reacts readily, forming ethane, ethylene and other hydrocarbons, no acetylene remaining unchanged if the hydrogen is in excess.—On the copper and mercury organo-metallic compounds of diphenylcarbazone.—On acidimetry, by M. A. Astruc. A study of the behaviour of isethionic, sulphanic, meconic and mellic acids with indicators.—On a new species of subterranean Isopod, *Caecosphaeroma Faucheri*, by MM. Adrien Dollfus and Armand Viré.—Gregarinæ and intestinal epithelium, by MM. L. Léger and O. Duboscq.—On the animal fossils collected by M. Villiaume in the carboniferous strata near Nossi-Bé, by M. H. Douville. The whole of the carboniferous strata in the region of Nossi-Bé belongs to the Upper Lias, and is to be classified with the carboniferous strata of the same age in the north of Persia.—On the vegetable fossils collected by M. Villiaume in the carboniferous beds in the north-west of Madagascar, by M. R. Zeiller. The conclusions drawn are in harmony with those drawn by M. Douville in the previous paper from a study of the animal fossils.—The volcano of Gravenoire and the mineral springs of Royat, by M. P. Glangeaud.

DIARY OF SOCIETIES.

THURSDAY, JUNE 14.

ROYAL SOCIETY, at 4.—Election of Fellows.—At 4.30.—Some New Observations on the Static Diffusion of Gases and Liquids, and their Significance in certain Natural Processes occurring in Plants: H. T. Brown, F.R.S., and F. Escombe.—The Electrical Effects of Light upon Green Leaves (Preliminary Communication): Dr. A. D. Waller, F.R.S.—The Nature and Origin of the Poison of Egyptian Lotus (*Lotus Arabicus*): W. R. Dunstan, F.R.S., and T. A. Henry.—The Exact Histological Localisation of the Visual Area of the Human Cerebral Cortex: Dr. J. S. Bolton.—Data for the Problem of Evolution in Man. V. On the Correlation between Duration of Life and the Number of Offspring: Miss M. Beeton, G. U. Yule, and Prof. K. Pearson, F.R.S.—The Diffusion of Ions produced in Air by the Action of a Radio-active Substance, Ultra-violet Light and Point Discharges: J. S. Townsend.—On an Artificial Retina and on a Theory of Vision, Part I.: Prof. J. C. Bose.

MATHEMATICAL SOCIETY, at 5.30.—Some Multiform Solutions of the Partial Differential Equations of Physical Mathematics and their Applications, Part II.: H. S. Carslaw.—Some Quadrature Formulæ: W. F. Sheppard.—Notes on Concomitants of Binary Quantics: Prof. Elliott, F.R.S.—Extensions of the Riemann-Roch Theorem in Plane Geometry: Dr. Macaulay.—On the Invariants of a certain Differential Expression connected with the Theory of Geodesics: J. E. Campbell.—On the Constants which occur in the Differentiation of Theta Functions: Rev. M. M. U. Wilkinson.—On the Transitive Groups of Degree n and Class $n-1$: Prof. W. Burnside, F.R.S.—The Invariant Syzygies of Lowest Order for any Number of Quatics: A. Young.—Further Notes on Bilinear Forms: T. J. I'A. Bromwich.

MONDAY, JUNE 18.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Country between Lake Rudolf and the Nile Valley: Captain M. S. Wellby.

TUESDAY, JUNE 19.

ZOOLOGICAL SOCIETY, at 8.30.—On the Significance of the Hair-slope in certain Mammals: Dr. Walter Kidd.—On the Anatomy of *Bassari-cyon alleni*: F. E. Beddard, F.R.S.—Observations on the Habits and Natural Surroundings of Insects and other Animals, made during the "Skeat" Expedition to the Siamese Malay States: Nelson Annandale.

ROYAL STATISTICAL SOCIETY, at 5.—The Defence Expenditure of the Empire: The Right Hon. Sir Charles W. Dilke, Bart.

MINERALOGICAL SOCIETY, at 8.—On Conchite, a New Variety of Calcium Carbonate: Miss Agnes Kelly.—On the General Determination of the Three Principal Indices of Refraction from Observations made in any Arbitrary Zone: G. F. Herbert Smith.—On Monazite from Tintagel: H. L. Bowman.—On the Oxidation of Pyrites by Underground Water: Dr. J. W. Evans.—Petrological Notes: G. T. Prior.—A Quantitative Determination of the Action of Hydrochloric Acid and Soda Solution on the Enstatite and Felspar of the Mount Zomba Meteorite: L. Fletcher, F.R.S.

WEDNESDAY, JUNE 20.

GEOLOGICAL SOCIETY, at 8.—On the Skeleton of a Theriodont Reptile from the Bavians River (Cape Colony): Prof. H. G. Seeley, F.R.S.—On

Radiolaria from the Upper Chalk at Coulsdon (Surrey): W. Murton Holmes.—Fossils in the Oxford University Museum. IV. Notes on some Undescribed Trilobites: H. H. Thomas.

ROYAL METEOROLOGICAL SOCIETY, at 4.30.—Rainfall in the West and East of England in Relation to Altitude above Sea-level: William Marriott.—Description of Halliwell's Self-recording Rain Gauge: Joseph Baxendell.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Demonstration on the Structure of some Palæozoic Plants, with Sections of the Plants shown by the Lantern: W. Carruthers, F.R.S.

THURSDAY, JUNE 21.

ROYAL SOCIETY, at 4.30.

LINNEAN SOCIETY, at 8.—On some Scandinavian Crustacea: Dr. A. G. Ohlin.—The Subterranean Amphipoda of the British Islands: Chas. Chilton.—On certain Glands of Australian Earthworms: Miss Sweet.—Notes on Najas: Dr. A. B. Rendle.

ZOOLOGICAL SOCIETY, at 4.30.—The Gigantic Sloths of Patagonia: Prof. E. Ray Lankester, F.R.S.

ANATOMICAL SOCIETY (Owens College, Manchester), at 10.30.—Lantern Demonstration on the Comparative Anatomy and Histology of the True Cæcal Apex—the Appendix Vermiformis: Dr. R. J. Berry.—Lantern Demonstration of some Surface Markings of the Calvaria, and their Significance: Prof. Dixon.—Lantern Demonstration of Microphotographs of the Maturation Stages in the Ovum of Echinus: Dr. T. H. Bryce.—Some Points in the Anatomy of the Digestive System: Prof. Birmingham.—(a) Two Cases of Absent Vermiform Appendix; (b) A Specimen showing Direct Continuity between the Long External Lateral Ligament of the Knee-joint and the Peroneus Longus Muscle; (c) A Supernumerary Bone in the Carpus connected with the Trapezium: Prof. Fawcett.—A Note on the Genital Apparatus of the Jerboa: Dr. Armour.

CHEMICAL SOCIETY, at 8.—Ballot for the Election of Fellows.—Notes on the Chemistry of Chlorophyll: Dr. L. Marchlewski and C. A. Schunck.—Researches on Morphine, I.: Dr. S. B. Schryver and F. H. Lees.—A New Series of Pentamethylene Derivatives, I.: Prof. W. H. Perkin, jun., F.R.S., Dr. J. F. Thorpe, and C. W. Walker.—Experiments on the Synthesis of Camphoric Acid. III. The Action of Sodium and Methyl Iodide on Ethyl-dimethyl-butanetricarboxylate: Prof. W. H. Perkin, jun., F.R.S., and Dr. J. F. Thorpe.—On the Oxime of Mesoxamide and some Allied Compounds: Miss M. A. Whiteley.—The Oxyphenoxo- and Phenyleneoxy-acetic Acids: W. Carter and Dr. W. T. Lawrence.—(1) The Condensation of Ethyl α -Bromo-isobutyrate with Ethyl Malonates and Ethyl Cyanacetates: α -Methyl- α -isobutylglutaric Acid; (2) Methylisoamylsuccinic Acid, II.: Dr. W. T. Lawrence.

FRIDAY, JUNE 22.

PHYSICAL SOCIETY, at 5.—Notes on Gas Thermometry: Dr. P. Chappuis.—A Comparison of Impure Platinum Thermometers: H. M. Tory.—On the Law of Cailletet and Mathias and the Critical Density: Prof. J. Young, F.R.S.

ANATOMICAL SOCIETY (Owens College, Manchester), at 10.30.—Note on the Configuration of the Heart in a Man and some other Mammalian Groups: Dr. C. J. Patten.—On the Arrangement of the Pelvic Fascia and their Relationship to the Levator Ani: Dr. Peter Thompson.—(a) A Preliminary Note on the Development of the Sternum; (b) Specimens of Diaphragmatic Hernia and of a Left Inferior Vena Cava: Prof. Paterson.—Preparations and Lantern Slides illustrating: (a) The Anatomy of the Subclavian and Axillary Arteries; (b) The Position and Relations of the Eustachian Tubes; (c) Stereoscopic Views of Anatomical Preparations: Dr. Arthur Robinson.—A Series of Microscopical Preparations illustrating the Development of the Posterior End of the Aorta: Prof. Young and Dr. Arthur Robinson.—Demonstration of a Series of Preparations of the Posterior End of the Adult Aorta: Prof. Young.

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